APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,146	10/27/2000	Kiichiro Yamagishi	06753.0385	3694

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EXAMINER
HAN, QI

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/697,146	YAMAGISHI ET AL.
Office Action Summary	Examiner	Art Unit	
	Qi Han	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-25_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1,3-8,10-13,15-20 and 22-25_ is/are rejected.
7) ☒ Claim(s) _2,9,14 and 21_ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _27 December 2000_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some * c) ☐ None of:
       1. ☒ Certified copies of the priority documents have been received.
       2. ☐ Certified copies of the priority documents have been received in Application No. _____.
       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _4_.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1.   The references listed in the Information Disclosure Statement submitted on 10/27/2000

have been considered by the examiner (see attached PTO-1449).

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers

have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth

in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

3.   Claims 1, 13 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Miyazawa et al. (US 5,946,658) hereinafter referenced as Miyazawa, in view of Wang et al. (US

6,505,162 B1) hereinafter referenced as Wang.

As per **claim 1**, Miyazawa discloses cartridge-based, interactive speech recognition

method with a response creation capability (title), comprising:

a voice input section inputting voice uttered by a user (column 6, lines 30-49 and Fig. 1, 'input unit 1, which inputs the speaker's voice');

a voice recognition processing section recognizing the voice inputted by the voice input section, and converting the recognized voice (speech) into an input symbol string (column 6, lines 30-49 and Fig. 1, 'to recognize words spoken', 'speech recognition (converting the recognized voice) and dialogue management unit 4', 'recognizable words (symbol string)');

a conversation pattern processing section inputting said input symbol string from the voice recognition processing section, and outputting an output symbol string corresponding to said input symbol string based on a conversation pattern described in advance, (column 4, lines 1-17 and Fig. 1, 'conversation content storage for retaining canned context rules (broadly interpreted as conversation pattern(s) described in advance) and response procedures when recognized words or phrases (symbol string) are encountered (input)', response data storage for retaining response voice vector data used in formulating an appropriate response to perceived and recognized words and corresponding context and action rules'; Fig. 1 and column 6, lines 38-42, 'speech recognition and dialogue management unit 4', 'response (output) data memory unit 4, which stores pre-set (described in advance) response data (necessarily including symbol string, since it will output to a voice synthesis unit 6)');

a voice synthesis processing section converting said output symbol string from the conversation pattern processing section into voice (Fig. 1 and column 6, lines 38-42, 'voice synthesis unit 6');

a voice output section outputting and uttering the voice from the voice synthesis processing section (Fig. 1 and column 6, lines 38-42, 'voice output unit 7'); and

Even though Miyazawa discloses changing said output symbol string in accordance with the grasped conversation characteristics (column 5, lines 12-14, 'conversation and response information can be changed or updated as the general culture (broadly interpreted grasped conversation characteristics) changes'; column 12, lines 20-22, 'when a recognition word is determined, speech recognition and dialogue manager 4 comprehends (grasp) the meaning of the input voice, determine a response ... detects fluctuation data'), Miyazawa does not expressly disclose "a conversation characteristic control section grasping conversation characteristics of said user based on said input symbol string from said conversation pattern processing section". However, this feature is well known in the art as evidenced by Wang who discloses apparatus and method of r portable dialogue management using a hierarchical task description table (title), comprising a conversational dialogue manager that has a standard control mechanism (a conversation characteristic control section), selects (grasp) appropriate dialogue states (broadly interpreted as conversation characteristics of the user), executes the response actions, extracts (grasp) the domain-dependent factors (conversation characteristics of the user), controls the dialogue flow according to semantic input (necessarily including recognized and comprehended meaning of the input voice stated above) of a user and the instruction provided by the external knowledge base to generate semantic output in response, replaces the knowledge base (column 5, lines 43-64), and update the dialogue flow (column 6, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Miyazawa by specifically providing a control mechanism for dialogue (conversation) management, as taught by Wang, for the purpose of increasing flexibility for a dialogue management. (Wang: column 4, lines 5-7).

As per **claim 13**, it recites a method. The rejection is based on the same reason as described for claim 1, because the claim recites same or similar limitation(s) as claim 1.

As per **claim 25**, it recites a computer readable recording medium. The rejection is based on the same reason as described for claim 1, because the claim recites same or similar limitation(s) as claim 1.

4.   Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa et al. (US 5,946,658) hereinafter referenced as Miyazawa, in view of Marx et al. (US 6,173,266 B1) hereinafter referenced as Marx.

As per **claim 3**, Miyazawa discloses cartridge-based, interactive speech recognition method with a response creation capability (title), comprising:

a voice input section inputting voice uttered by a user (column 6, lines 30-49 and Fig. 1, 'input unit 1, which inputs the speaker's voice');

a voice recognition processing section recognizing the voice inputted by the voice input section, and converting the recognized voice (speech) into an input symbol string (column 6, lines 30-49 and Fig. 1, 'to recognize words spoken', 'speech recognition (converting the recognized voice) and dialogue management unit 4', 'recognizable words (symbol string)');

a conversation pattern processing section inputting said input symbol string from the voice recognition processing section, and outputting an output symbol string corresponding to said input symbol string based on a conversation pattern described in advance, (column 4, lines 1-17 and Fig. 1, 'conversation content storage for retaining canned context rules (broadly interpreted as conversation pattern(s) described in advance) and response procedures when

recognized words or phrases (symbol string) are encountered (input)', response data storage for

retaining response voice vector data used in formulating an appropriate response to perceived

and recognized words and corresponding context and action rules'; Fig. 1 and column 6, lines

38-42, 'speech recognition and dialogue management unit 4', 'response (output) data memory

unit 4, which stores pre-set (described in advance) response data (necessarily including symbol

string, since it will output to a voice synthesis unit 6)');

   a voice synthesis processing section converting said output symbol string from the

conversation pattern processing section into voice (Fig. 1 and column 6, lines 38-42, 'voice

synthesis unit 6');

   a voice output section outputting and uttering the voice from the voice synthesis

processing section (Fig. 1 and column 6, lines 38-42, 'voice output unit 7').

   Even though Miyazawa discloses a storage section storing words relevant to words

uttered by the user (column 18, lines 56-67, 'conversation context memory 101 stores the

information related to the kind of phrases which have been registered and the kind of responses

that should be issued to each of theses registered phrase'), Miyazawa does not expressly disclose

storing the words being "**synonyms**", and "an association function section extracting the

synonyms and relevant words synonymous with and relevant to words uttered by said user from

said storage section based on said input symbol string from said conversation pattern processing

section, and outputting said extracted synonyms and relevant words to said conversation pattern

processing section". However, this feature is well known in the art as evidenced by Marx who

discloses system and method for developing interactive speech applications (title), comprising

dialogue modules (abstract), processing user response by using synonyms (column 9, lines 30-

39), editing items and synonyms of the vocabulary using a predefined system dictionary, listing

synonyms under their items at an indented tier, and adding, deleting, highlighting (broadly

interpreted as association function of extracting) synonyms of an recognized item (column 19,

lines 16-33, and Figs. 12 and 13), which corresponds to the claimed limitation. Therefore, it

would have been obvious to one of ordinary skill in the art at time the invention was made to

modify Miyazawa by specifically providing storing and extracting synonyms and relevant words

for the recognized words, as taught by Marx, for the purpose of offering alternative terms of the

recognized items for a dialogue module (Marx: column 19, lines 10-13).

As per **claim 15,** it recites a method. The rejection is based on the same reason as

described for claim 3, because the claim recites same or similar limitation(s) as claim 3.

5.   Claims 4-5 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Miyazawa et al. (US 5,946,658) hereinafter referenced as Miyazawa, in view of Petkovic (US

6,185,527 B1) hereinafter referenced as Petkovic.

As per **claim 4,** Miyazawa discloses cartridge-based, interactive speech recognition

method with a response creation capability (title), comprising:

a voice input section inputting voice uttered by a user (column 6, lines 30-49 and Fig. 1,

'input unit 1, which inputs the speaker's voice');

a voice recognition processing section recognizing the voice inputted by the voice input

section, and converting the recognized voice (speech) into an input symbol string (column 6,

lines 30-49 and Fig. 1, 'to recognize words spoken', 'speech recognition (converting the

recognized voice) and dialogue management unit 4', 'recognizable words (symbol string)');

a conversation pattern processing section inputting said input symbol string from the

voice recognition processing section, and outputting an output symbol string corresponding to

said input symbol string based on a conversation pattern described in advance, (column 4, lines

1-17 and Fig. 1, 'conversation content storage for retaining canned context rules (broadly

interpreted as conversation pattern(s) described in advance) and response procedures when

recognized words or phrases (symbol string) are encountered (input)', response data storage for

retaining response voice vector data used in formulating an appropriate response to perceived

and recognized words and corresponding context and action rules'; Fig. 1 and column 6, lines

38-42, 'speech recognition and dialogue management unit 4', 'response (output) data memory

unit 4, which stores pre-set (described in advance) response data (necessarily including symbol

string, since it will output to a voice synthesis unit 6)');

a voice synthesis processing section converting said output symbol string from the

conversation pattern processing section into voice (Fig. 1 and column 6, lines 38-42, 'voice

synthesis unit 6');

a voice output section outputting and uttering the voice from the voice synthesis

processing section (Fig. 1 and column 6, lines 38-42, 'voice output unit 7').

Even though Miyazawa discloses a storage section storing words relevant to words

uttered by the user (column 18, lines 56-67, 'conversation context memory 101 stores the

information related to the kind of phrases which have been registered and the kind of responses

that should be issued to each of theses registered phrase'), Miyazawa does not expressly disclose

"a second recognition processing section recognizing broadcast voice from a broadcast station,

and converting the recognized broadcast voice into second input symbol strings" and "an event

data storage section storing said second input symbol strings as event data." However, this feature is well known in the art as evidenced by Petkovic who discloses system and method for automatic audio content analysis for word spotting, indexing, classification and retrieval (title), comprising audio source, such as a broadcast network, or radio station, speech recognition engine (necessarily converting speech (voice) into text (symbol strings) (column 6, lines 48-67), and a data storage device having computer usable code means for classifying and indexing (herein inherently include storing) audio signals representing audio events, including using a speech recognition engine to render words (symbol strings) and alternatives to some words (column 17, lines 23-56). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Miyazawa by specifically providing a speech recognition mechanism for broadcast audio source and a data storage for storing event data related to the audio processing, including speech recognition, as taught by Petkovic, for the purpose of recognizing many audio applications benefiting from a more generalized ability, based on predetermined audio events (Petkovic: column 2, line 67 to column 3, line 4).

As per **claim 5** (depending on claim 4), as stated above, Petkovic discloses using broadcast audio source (column 6, lines 48-67), using a data storage device and a speech recognition engine to render words (symbol strings) and alternatives to some words from (column 17, lines 23-56), which suggests the combined system is capable of implementing functionality as claimed "extracting only a symbol string desired by the user among said second input symbol strings converted by said second voice recognition section, and storing the extracted symbol string in said event data storage section". Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Miyazawa by

specifically providing a mechanism for extracting only words among from broadcast audio

source and storing them, as taught by Petkovic, for the purpose of recognizing many audio

applications benefiting from a more generalized ability, based on predetermined audio events

(Petkovic: column 2, line 67 to column 3, line 4).

As per **claim 16**, it recites a method. The rejection is based on the same reason as

described for claim 4, because the claim recites same or similar limitation(s) as claim 4.

As per **claim 17** (depending on claim 16), the rejection is based on the same reason as

described for claim 5, because the claim recites same or similar limitation(s) as claim 5.

6.   Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Miyazawa in view of Petkovic as applied to claim 4 above, and further in view of Wang.

As per **claim 6** (depending on claim 4), even though Miyazawa discloses changing said

output symbol string in accordance with the grasped conversation characteristics (column 5, lines

12-14, 'conversation and response information can be changed or updated as the general culture

(broadly interpreted grasped conversation characteristics) changes'; column 12, lines 20-22,

'when a recognition word is determined, speech recognition and dialogue manager 4

comprehends (grasp) the meaning of the input voice, determine a response ... detects fluctuation

data'), Miyazawa in view of Petkovic does not expressly disclose "a conversation characteristic

control section grasping conversation characteristics of said user based on said input symbol

string from said conversation pattern processing section". However, this feature is well known

in the art as evidenced by Wang who discloses apparatus and method of r portable dialogue

management using a hierarchical task description table (title), comprising a conversational

dialogue manager that has a standard control mechanism (a conversation characteristic control section), selects (grasp) appropriate dialogue states (broadly interpreted as conversation characteristics of the user), executes the response actions, extracts (grasp) the domain-dependent factors (conversation characteristics of the user), controls the dialogue flow according to semantic input (necessarily including recognized and comprehended meaning of the input voice stated above) of a user and the instruction provided by the external knowledge base to generate semantic output in response, replaces the knowledge base (column 5, lines 43-64), and update the dialogue flow (column 6, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Miyazawa in view of Petkovic by specifically providing a control mechanism for dialogue (conversation) management, as taught by Wang, for the purpose of increasing flexibility for a dialogue management. (Wang: column 4, lines 5-7).

As per **claim 18** (depending on claim 16), the rejection is based on the same reason as described for claim 6, because the claim recites same or similar limitation(s) as claim 6.

7.   Claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa in view of Petkovic as applied to claim 4 above, and further in view of Marx.

As per **claim 7** (depending on claim 4), even though Miyazawa discloses a storage section storing words relevant to words uttered by the user (column 18, lines 56-67, 'conversation context memory 101 stores the information related to the kind of phrases which have been registered and the kind of responses that should be issued to each of theses registered phrase'), Miyazawa in view of Petkovic does not expressly disclose storing the words being

"**synonyms**", and "an association function section extracting the synonyms and relevant words synonymous with and relevant to words uttered by said user from said storage section based on said input symbol string from said conversation pattern processing section, and outputting said extracted synonyms and relevant words to said conversation pattern processing section". However, this feature is well known in the art as evidenced by Marx who discloses system and method for developing interactive speech applications (title), comprising dialogue modules (abstract), processing user response by using synonyms (column 9, lines 30-39), editing items and synonyms of the vocabulary using a predefined system dictionary, listing synonyms under their items at an indented tier, and adding, deleting, highlighting (broadly interpreted as association function of extracting) synonyms of an recognized item (column 19, lines 16-33, and Figs. 12 and 13), which corresponds to the claimed limitation. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Miyazawa in view of Petkovic by specifically providing storing and extracting synonyms and relevant words for the recognized words, as taught by Marx, for the purpose of offering alternative terms of the recognized items for a dialogue module (Marx: column 19, lines 10-13).

As per **claim 19** (depending on claim 16), the rejection is based on the same reason as described for claim 7, because the claim recites same or similar limitation(s) as claim 7.

8.   Claims 8, 12, 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa in view of Petkovic, and further in view of Kanevsky et al. (US 6,236,968 B1) hereinafter referenced as Kanevsky.

As per **claim 8**, Miyazawa discloses cartridge-based, interactive speech recognition

method with a response creation capability (title), comprising:

a voice input section inputting voice uttered by a user (column 6, lines 30-49 and Fig. 1,

'input unit 1, which inputs the speaker's voice');

a voice recognition processing section recognizing the voice inputted by the voice input

section, and converting the recognized voice (speech) into an input symbol string (column 6,

lines 30-49 and Fig. 1, 'to recognize words spoken', 'speech recognition (converting the

recognized voice) and dialogue management unit 4', 'recognizable words (symbol string)');

a conversation pattern processing section inputting said input symbol string from the

voice recognition processing section, and outputting an output symbol string corresponding to

said input symbol string based on a conversation pattern described in advance, (column 4, lines

1-17 and Fig. 1, 'conversation content storage for retaining canned context rules (broadly

interpreted as conversation pattern(s) described in advance) and response procedures when

recognized words or phrases (symbol string) are encountered (input)', response data storage for

retaining response voice vector data used in formulating an appropriate response to perceived

and recognized words and corresponding context and action rules'; Fig. 1 and column 6, lines

38-42, 'speech recognition and dialogue management unit 4', 'response (output) data memory

unit 4, which stores pre-set (described in advance) response data (necessarily including symbol

string, since it will output to a voice synthesis unit 6)');

a voice synthesis processing section converting said output symbol string from the

conversation pattern processing section into voice (Fig. 1 and column 6, lines 38-42, 'voice

synthesis unit 6');

a voice output section outputting and uttering the voice from the voice synthesis

processing section (Fig. 1 and column 6, lines 38-42, 'voice output unit 7').

Even though Miyazawa discloses a storage section storing words relevant to words

uttered by the user (column 18, lines 56-67, 'conversation context memory 101 stores the

information related to the kind of phrases which have been registered and the kind of responses

that should be issued to each of theses registered phrase'), Miyazawa does not expressly disclose

"an event data storage section storing the event data". However, this feature is well known in

the art as evidenced by Petkovic who discloses system and method for automatic audio content

analysis for word spotting, indexing, classification and retrieval (title), comprising a data storage

device having computer usable code means, including using predetermined audio features being

reprehensive of respective audio events (event data, which is necessarily stored in the data

storage), and using a speech recognition engine to render words (interpreted as event data since

they are directly associated to the audio events) and alternatives to some words (column 17, lines

23-56). Therefore, it would have been obvious to one of ordinary skill in the art at time the

invention was made to modify Miyazawa by specifically providing a data storage for storing

event data relating the audio processing, as taught by Petkovic, for the purpose of recognizing

many audio applications benefiting from a more generalized ability, based on predetermined

audio events (Petkovic: column 2, line 67 to column 3, line 4).

Miyazawa in view of Petkovic does not expressly disclose a mechanism "transmitting

said input symbol string to the other interactive system as event data, and receiving event data

consisting of the symbol string from said other interactive system". However, this feature is well

known in the art as evidenced by Kanevsky who disclose that an automatic dialog system

includes a speech recognition module and a speech generation module (abstract), comprising an

external service provider adapter 122 for facilitating communications between the dialog car

system and a remotely located external service provider 123, the external provider receives alert

signals (necessarily includes some symbol string) and the actual content of conversation will be

transferred from the external service provider 123 to the conversational planner 107 (column 5,

lines 22-64 and Fig. 1).   Therefore, it would have been obvious to one of ordinary skill in the art

at time the invention was made to modify Miyazawa in view of Petkovic by specifically

providing a mechanism for transmitting processed data (symbol string) from one interactive

system to the other, as taught by Kanevsky, for the purpose of updating the appropriate modules

with new data (Kanevsky: column 5, lines 40-51).

As per **claim 12** (depending on claim 8), Petkovic further discloses audio source, such as

a broadcast network, or radio station, speech recognition engine (necessarily converting speech

(voice) into text (symbol strings) (column 6, lines 48-67), and a data storage device having

computer usable code means for classifying and indexing (herein inherently include storing)

audio signals representing audio events, including using a speech recognition engine to render

words (symbol strings) and alternatives to some words (column 17, lines 23-56), which

corresponds to the claimed "a second recognition processing section recognizing broadcast voice

from a broadcast station, and converting the recognized broadcast voice into second input

symbol strings" and "an event data storage section storing said second input symbol strings as

event data".   Therefore, it would have been obvious to one of ordinary skill in the art at time the

invention was made to modify the combined system as stated above by specifically providing a

speech recognition mechanism for broadcast audio source and a data storage for storing event

data related to the audio processing, including speech recognition, as taught by Petkovic, for the purpose of recognizing many audio applications benefiting from a more generalized ability, based on predetermined audio events (Petkovic: column 2, line 67 to column 3, line 4).

As per **claim 20**, it recites a method. The rejection is based on the same reason as described for claim 8, because the claim recites same or similar limitation(s) as claim 8.

As per **claim 24** (depending on claim 20), the rejection is based on the same reason as described for claim 12, because the claim recites same or similar limitation(s) as claim 12.

9.   Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa in view of Petkovic and Kanevsky as applied to claim 8 above, and further in view of Wang.

As per **claim 10** (depending on claim 8), the rejection is based on the same reason as described for claim 6, because the claim recites same or similar limitation(s) as claim 6.

As per **claim 22** (depending on claim 20), the rejection is based on the same reason as described for claim 10, because the claim recites same or similar limitation(s) as claim 10.

10.   Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa in view of Petkovic and Kanevsky as applied to claim 8 above, and further in view of Marx.

As per **claim 11** (depending on claim 8), the rejection is based on the same reason as described for claim 7, because the claim recites same or similar limitation(s) as claim 7.

As per **claim 23** (depending on claim 20), the rejection is based on the same reason as described for claim 11, because the claim recites same or similar limitation(s) as claim 11.

Allowable Subject Matter

11.   Claims 2, 9, 14 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Regarding **claim 2** (depending on claim 1), the prior art of record fail to specifically disclose or fairly suggest the interactive speech recognition and speech synthesis system with distinct combined features that comprises:

a conversation characteristic control section grasping conversation characteristics of said user based on said input symbol string from said conversation pattern processing section, and changing said output symbol string in accordance with the grasped conversation characteristics (inherited from claim 1); and

a conversation characteristic control section that optimizes a conversation topic, a conversation pattern, uttered words, a conversation response interval, utterance frequency and timing during the utterance based on words and a conversation pattern used by the user with high frequency, a specific topic, times of conversation responses and utterance time and the number of words uttered by the user.

Regarding **claim 9** (depending on claim 8), the prior art of record fail to specifically

disclose or fairly suggest the interactive speech recognition and speech synthesis system with

distinct combined features that comprises:

an event data transmission and reception section transmitting said input symbol string to

the other interactive system as event data, and receiving event data consisting of the symbol

string from said other interactive system; an event data storage section storing the event data

received by the event data transmission and reception section from said other interactive system.

(inherited from claim 8); and

an input section inputting a privacy protection command of said user; and a privacy

protecting function section transmitting said event data acquired by utterance of said user to said

other interactive system if said privacy protection command is not inputted from the input

section, and not transmitting said event data acquired by the utterance of said user to said other

interactive system if said privacy protection command is inputted from the input section.

Regarding **claim 14** (depending on claim 13), the allowance is based on the same reason

as described for claim 2, because the claim recites same or similar limitation(s) as claim 2.

Regarding **claim 21** (depending on claim 20), the allowance is based on the same reason

as described claim for 9, because the claim recites same or similar limitation(s) as claim 9.

12.   The prior art, Miyazawa et al. (US 5,946,658), Wang et al. (US 6,505,162 B1), Marx et

al. (US 6,173,266 B1), Petkovic (US 6,185,527 B1) and Kanevsky et al. (US 6,236,968 B1), of

record provided numerous teachings or alternative approach for speech and speaker recognition

with noise, including generating background noise models, spectral domain analysis, measuring

the average (mean) and variance of a signal, estimating noise statistical properties, selective

addition of noise, adding and subtracting mean, modifying noise speech. However, the features

as presented above are not anticipated by, nor made obvious by the prior art of the record.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

13.   Any response to this action should be mailed to:
          Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
       or faxed to:
          (703) 872-9306, (for formal communications intended for entry)
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QH/qh
September 13, 2004

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